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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/531,104	04/11/2005	Kimmo Laiho	006559.00008	2704

22907 7590 01/29/2010

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EXAMINER	
DANG, KHANH	

ART UNIT	PAPER NUMBER
2111	

MAIL DATE	DELIVERY MODE
01/29/2010	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	10/531,104	LAIHO, KIMMO	
	Examiner	Art Unit	
	Khanh Dang	2111	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE *3* MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *10 December 2009*.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1,2,4,5,7-10,12-14 and 17-22* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1, 2, 4, 5, 7-10, 12-14, and 17-22* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

Claim Objections

In claim 22, limitation found in claim 22 is also found in claim 1. In other words, claim 22 fails to further limit the scope of claim 1.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

Claims 1, 2, 4, 5, 7-10, 14, and 17-22 is rejected under 35 U.S.C. 103(a) as being unpatentable over Oguma in view of Hsu et al. (Hsu, 6393588).

With regard to claim 1, Oguma discloses an apparatus comprising: a device operable as a host device, the device including: a bus; a first port, the first port having a first port voltage supply connection, a first port ground connection, a first port first data

connection and a first port second data connection, the first port being connected directly to the bus; a second port, the second port having a second port voltage supply connection, a second port ground connection, a second port first data connection and a second port second data connection, the second port being connected directly to the bus; a host module, the host module being connected directly to the bus; and a comparator, the comparator being coupled to the bus and being operable for detecting the presence of a host externally connected to the bus; wherein the host module is responsive to the comparator for relinquishing host status in response to the detection by the comparator of the presence of the host externally connected to the bus (at the outset, Applicants' Fig. 3 is reproduced below for comparison.

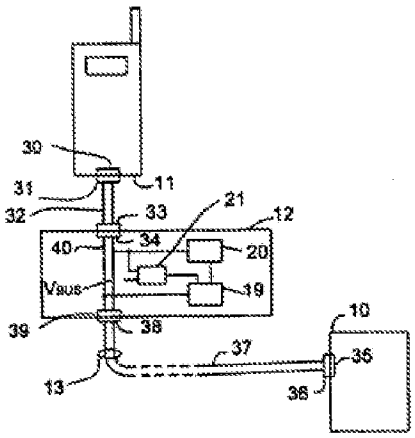
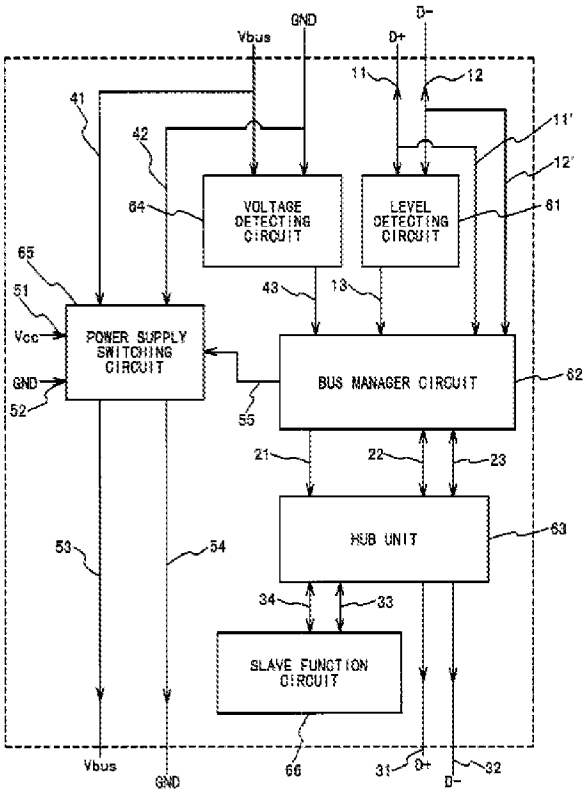


Figure 3

As shown in Applicants' Fig. 3, element 12 is the so-called "device operable as a host device," element 34 is the "first USB port," element 39 is the "second USB port," element 19 is the "host module," element 21 is a "comparator," and element 10 is the so-called "host externally connected to the bus" (note that all USB ports/connectors

including Applicants' USB ports 34 and 39 include Vbus, GND, D+, and D-). The Vbus line of the USB bus is connected to "comparator" 21 while the rest of USB bus lines are connected to the "host module" 19. As shown in Fig. 3 of Oguma, which is reproduced below for ease of reference and comparison, Oguma discloses the so-called "device operable as a host" including a USB bus comprising Vbus, GND, D+, and D-. The device further comprises a first upstream USB port or "first port" having Vbus, GND, D+ and D-, connected directly to the USB bus; and a second USB downstream port or "second port" having Vbus, GND, D+ and D-, connected directly to the downstream of to the same USB bus running from the first upstream USB port to the second downstream USB port. The device as shown in Fig. 3 of Oguma also shows the so-called "host module" or bus manager circuit 62 connected directly to the same USB bus; and the "comparator" or voltage circuit 64 detecting coupled to the same USB bus to detect the presence of a host externally connected to the USB bus. A voltage detecting circuit basically comprises a voltage comparator for comprising a supply voltage with a reference voltage (VREF) to detect a change in voltage or a difference between supply voltage and reference voltage. Further, as noted above, a USB bus comprises Vbus, GND, D+, and D-. It is also important to note that Applicants' Fig. 3 shows a Vbus line, and other lines are grouped together as line 40. See at least column 2, lines 39-57, column 4, line 65 to column 6, line 17).

Fig. 3



Further, as shown in Fig. 3 of Oguma above, the Vbus and GND of the upstream USB port are connected directly to the corresponding Vbus and GND of the downstream USB port. Element 65 in Fig. 3 of Oguma is simply a power supply switching circuit to supply direct power from different USB power sources. To receive power directly from the Vbus and GND of the upstream USB port, the Vbus and GND of the downstream USB port must be connected directly to the Vbus and GND of the upstream USB port. In addition, as shown in Fig. 3, the D+ and D- of the upstream USB port is connected the D+ and D- of the downstream USB port via the bus manager circuit 62 and USB Hub 63. However, in column 4, lines 18-22, Oguma also discloses that the “bus manager circuit 62 passes through the signal [D+ and D-] between host

personal computer 1 [USB host] and the [downstream] bus peripheral units [USB devices] (emphasis added)."

Thus, the difference between the claim subject matter and that of Oguma is the direct connection between the D+ and D- lines of the upstream USB port and the D+ and D- of the downstream USB port. As shown in Fig. 3 of Oguma, the D+ and D- lines of the upstream USB port and the D+ and D- of the downstream USB port are connected via a USB Hub 63.

Hsu, in Fig. 1, which is reproduced below for ease of reference and convenience, discloses a plug-and play USB Hub 16 comprising an upstream USB port connected to a host 12 and downstream ports connected to USB devices 14. The purpose of using the USB Hub is to provide additional USB connections/ports to downstream of the USB Hub. See column 1, lines 7-61.

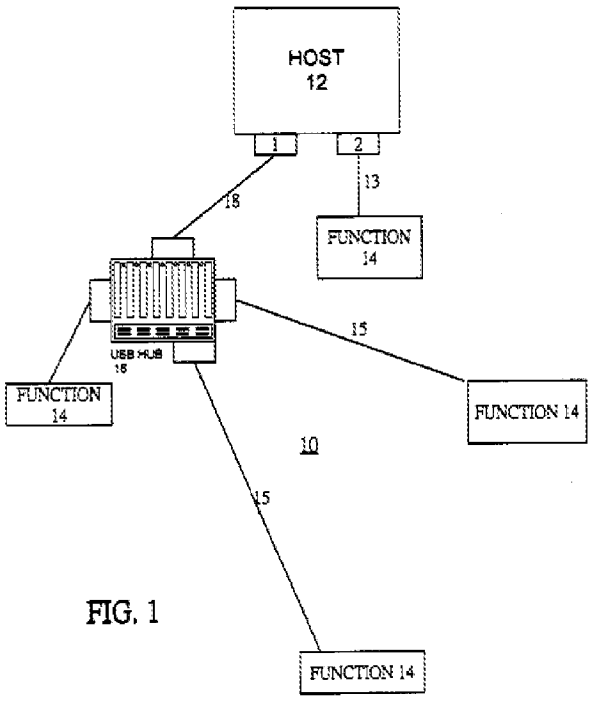


FIG. 1

Since the purpose of using a USB Hub is simply expanding the number of downstream USB ports that the USB Host can communicates with, as taught by Hsu, the use of the USB Hub is clearly optional.

Thus, it would have been obvious to one of ordinary skill in the art at the time the invention was made not to use the USB Hub in Oguma, since the purpose of using a USB Hub is simply expanding the number of downstream USB ports that the USB Host can communicates with, as taught by Hsu, and thus, the use of the USB Hub is clearly optional. When the USB Hub 63 is not employed in Fig. 3 of Oguma, it is clear that the D+ and D- lines of the upstream USB port and the D+ and D- lines of the downstream USB port are directly connected; and as a result, the USB bus passes USB D+ and D- directly from the upstream USB port or "first port" to the USB D+ and D- of the USB downstream port or "second port" responsive to relinquishment of host status.

With regard to claim 2, the host provides power supply for providing a supply voltage on a voltage supply line (Vbus GND) of the bus.

With regard to claim 4, it is clear from discussion above that the voltage detecting circuit detects a change in voltage on a voltage supply line of the bus, thereby detecting the presence of the other host. See at least column 2, lines 39-57, column 4, line 65 to column 6, line 17).

With regard to claim 5, it is clear from discussion above that the change is an increase.

With regard to claim 7, as best the Examiner can ascertain from the language of the claim, in Oguma, the portable device is arranged for causing at least some lines

Vbus GND, D lines of the port to be forced tri-state such as suspended, active, and unavailable states, on detecting the presence of another host.

With regard to claim 8, according to USB standard, upon discover a connected host, a reset signal is sent to a USB slave.

With regard to claim 9, see discussion above and at least column 2, lines 39-57, column 4, line 65 to column 6, line 17.

With regard to claim 10, see discussion above regarding claims 1 and 6 and at least column 2, lines 39-57, column 4, line 65 to column 6, line 17.

With regard to claim 14, see discussion above regarding claim 1.

With regard to claim 17, see discussion above.

With regard to claim 18, it is clear that a USB slave can be connected to the portable device. See at least Fig. 1.

With regard to claims 19-22, see discussion above regarding claim 1.

Claim 12 is rejected under 35 U.S.C. 103(a) as being unpatentable over Oguma in view of Hsu, as applied to claim 1 above, and further in view of Chandley (7349689).

As discussed above, Oguma discloses the claimed invention except for the inclusion of the bus manager circuit responsible for providing a host status to the portable device, to a battery pack for providing power supply to the portable device 5.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to place the bus manager responsible for priding the host status to the portable device, to the battery pack of the portable device, since the battery pack is always an integral part of the portable device as evidenced by at least Chandley (7,349,689), and further moving the manager circuit to the battery pack only involves ordinary skill in the art.

Claim 13 is rejected under 35 U.S.C. 103(a) as being unpatentable over Oguma in view of Hsu, as applied to claim 1 above, and further in view of Chandley (7349689).

As discussed above, Oguma discloses the claimed invention including the use of a portable device such as a portable phone.

However, Oguma does not disclose that the portable device is capable of receiving video broadcast.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to provide the portable device with capability of receiving video broadcast, since providing a portable device such as a portable or mobile phone with a capability of receiving video broadcast is old and well-known and only involves ordinary skill in the art as evidenced by at least Chandley (7,349,689). As a matter of fact, every smart phone is able to connect to the internet for downloading audio and video contents.

Response to Arguments

Applicants' arguments filed 12/10/2009 have been fully considered but they are not persuasive.

At the outset, Applicants are reminded that claims subject to examination will be given their broadest reasonable interpretation consistent with the specification. *In re Morris, 127 F.3d 1048, 1054-55 (Fed. Cir. 1997)*. As a matter of fact, the "examiner has the duty of police claim language by giving it the broadest reasonable interpretation." *Springs Window Fashions LP v. Novo Industries, L.P.,* 65 USPQ2d 1862, 1830, (Fed. Cir. 2003). Applicants are also reminded that claimed subject matter not the specification, is the measure of the invention. Disclosure contained in the specification cannot be read into the claims for the purpose of avoiding the prior art. *In re Sporck*, 55 CCPA 743, 386 F.2d, 155 USPQ 687 (1986). With this in mind, the discussion will focus on how the terms and relationships thereof in the claims are met by the references. Response to any limitations that are not in the claims or any arguments that are irrelevant and/or do not relate to any specific claim language will not be warranted.

With regard to claim 1, 2, 4, 5, 7-10, 14, and 17-22, Applicants have argued that "Claim 1 recites, inter alia: the first port voltage supply connection, the first port ground connection, the first port first data connection and the first port second data connection are connected directly respectively to the second port voltage supply connection, the second port ground connection, the second port first data connection and the second port second data connection by the bus Neither Oguma nor Hsu teach or suggest such features. Hsu describes nothing more than a standard USB hub, which is well known in

the art and which has a well understood … Taken together, the above portions of USB2.0 indicate that a hub operating according to the USB 2.0 specification has no direct communication between the downstream ports. Indeed, providing direct communication between the downstream ports of a USB hub would defeat the required functionality of the USB hub because the hub could then not support the required functionality as defined by the USB specification."

Contrary to Applicants' argument, as already discussed above, the difference between the claim subject matter and that of Oguma is the direct connection between the D+ and D- lines of the upstream USB port and the D+ and D- of the downstream USB port. As shown in Fig. 3 of Oguma, the D+ and D- lines of the upstream USB port and the D+ and D- of the downstream USB port are connected via a USB Hub 63.

Hsu, in Fig. 1, which is reproduced below for ease of reference and convenience, discloses a plug-and play USB Hub 16 comprising an upstream USB port connected to a host 12 and downstream ports connected to USB devices 14. The purpose of using the USB Hub is to simply provide additional USB connections/ports to downstream of the USB Hub. See column 1, lines 7-61.

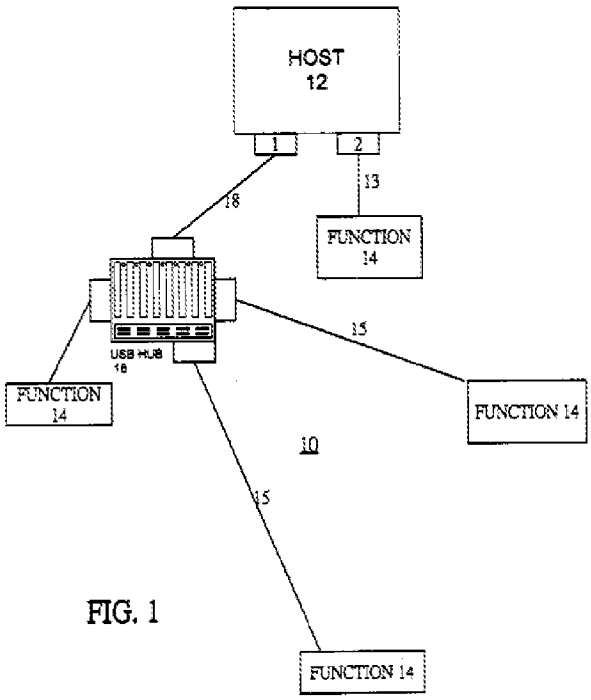


FIG. 1

Since the purpose of using a USB Hub is simply expanding the number of downstream USB ports that the USB Host can communicates with, as taught by Hsu, the use of the USB Hub is clearly optional.

Thus, it is clear that in the 103 Rejection, it is not suggested by the Examiner that the hub disclosed by Hsu replaces the hub disclosed by Oguma. Instead, it is the Examiner's position that since Hsu discloses that the purpose of using Hub 16 in Fig. 1 above is to simply provide additional USB downstream connections or ports, it is clear that the use of a USB Hub is clearly optional. Thus, as stated above, it would have been obvious to one of ordinary skill in the art at the time the invention was made not to use or eliminate the USB Hub 63 in Oguma, since the purpose of using a USB Hub is simply expanding the number of downstream USB ports that the USB Host can communicates with, as taught by Hsu, and thus, the use of the USB Hub is clearly

optional. When the USB Hub 63 is not employed in Fig. 3 of Oguma, it is clear that the D+ and D- lines of the upstream USB port and the D+ and D- lines of the downstream USB port are directly connected; and as a result, the USB bus passes USB D+ and D- directly from the upstream USB port or "first port" to the USB D+ and D- of the USB downstream port or "second port" responsive to relinquishment of host status.

Conclusion

THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Contact Information

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Khanh Dang whose telephone number is 571-272-3626. The examiner can normally be reached on Monday-Friday from 9:AM to 5:PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Mark Rinehart, can be reached on 571-272-3632. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

/Khanh Dang/

Primary Examiner, Art Unit 2111